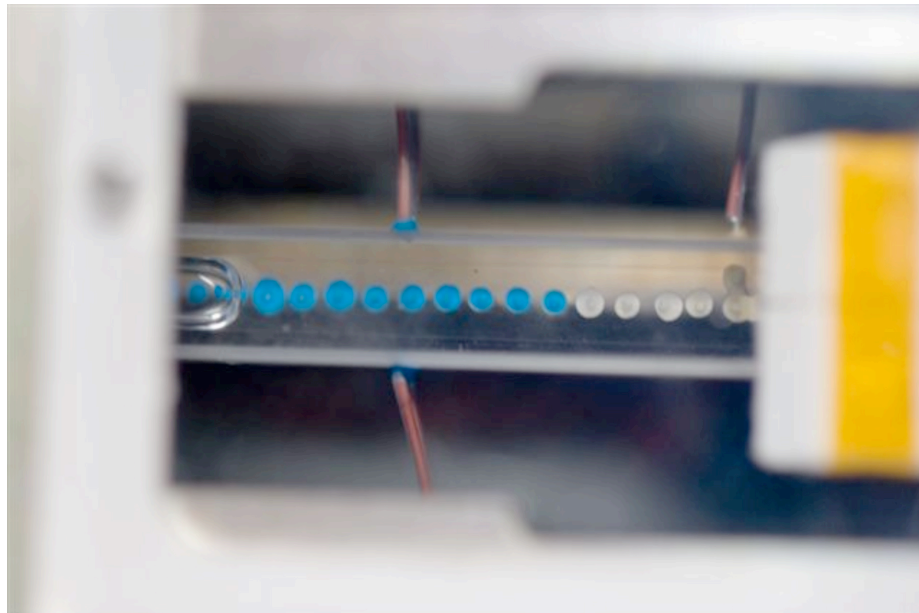


## **ISS and Human Research Project Office Highlights October 9, 2009**

### **ISS Research Program**

#### **Constrained Vapor Bubble (CVB) Module Inspection on ISS**

The ISS crew inspected the CVB 30-mm pentane filled module launched on STS-127/17A on August 25, 2009, on September 26, 2009 and the (constrained) bubble was observed. This indicated that the module has maintained pressure and will be ready to support operations when the Light Microscopy Module (LMM) is assembled in late October/early November. The 30-mm pentane module will be the first science experiment performed in the LMM. (POC: MAH/Ronald Sicker, (216) 433-6498)



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**During launch activities, the bubble has partially moved outside the field of view near the pressure sensor. The complete bubble will be brought into full view by cycling the heater and cooler. The heater and thermocouples are shown in this picture.**

#### **SAMS TSH-ES Sensor collected acceleration data in support of SODI MSG experiment.**

On October 1, 2009, the Space Acceleration Measurement System (SAMS) Tri-axial Sensor Head-Ethernet Standalone (TSH-ES) in the Microgravity Science Glovebox (MSG) was installed and checked out per procedure. The SAMS team at the Glenn Research Center (GRC) Telescience Support Center (TSC) collected acceleration data in support of the Selectable Optical Diagnostics Instrument (SODI) MSG experiment. SAMS has been on board the International Space Station (ISS) collecting microgravity environment data for scientific payloads since Flight 6A in April 2001. The SAMS TSH-ES is a smaller sensor than the SAMS Sensor Enclosure it replaced. This will allow SAMS to provide acceleration data to larger payloads in the MSG facility onboard the ISS. In the future, it will collect acceleration data for

the GRC payload Boiling Experiment Facility (BXF). BXF is scheduled to launch on Shuttle Flight 19A in March 2010. (POC: MAH/Robert Hawersaat, (216) 433-8157)

### **Human Research Program**

#### **IVGEN hardware completes thermal cycle testing**

Early on the morning of October 3, 2009, the IVGEN hardware successfully completed thermal cycle testing. (POC: MAH/DeVon Griffen, (216) 433-8109)